

## ABSTRACT OF THE INVENTION

The present invention is to provide a method of safely shutting down an embedded system based computer under an OS, the computer including a power switch having a power button being adapted to press for causing an I/O control chip to trigger a system chipset so that a CPU performs the steps of causing the triggered system chip to issue an IRQ to the CPU and receiving the same responsive to triggering the system chipset by the I/O control chip; activating a service routine for determining whether the IRQ is issued by the pressed power button; and terminating all running processes of the OS and performing a soft-off for stopping supplying power from a power supply to the computer if the determination is positive.